

CASE REPORT



Immediate Implant placement in palatal roots of maxillary molars.



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Background and Aim:

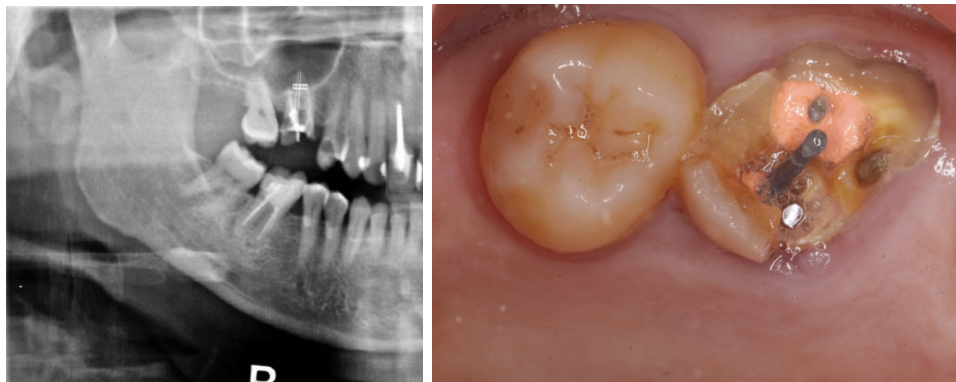
Immediate implant placement and immediate loading of single-tooth implants are reliable treatment options with high implant survival rates and good long-term results. Because of the anatomy of the roots immediate implant placement is usually performed in incisors, canines and premolars.

If performed in molars the authors usually suggest to place the implant in the septa between the roots.

In the majority of cases the vertical height in between the roots is insufficient for implant placement. In those cases a sinus-lift procedure after the healing of the socket is inevitable. The aim of the described workflow is to avoid a second invasive surgical intervention to place an implant together with sinus grafting procedures by immediate implant placement in the palatal root.

Initial-Situation

Tooth 16 in a 45 year old female could not be preserved. The X-ray showed the sinus reaching in between the roots. The perio-status was without pathological findings.

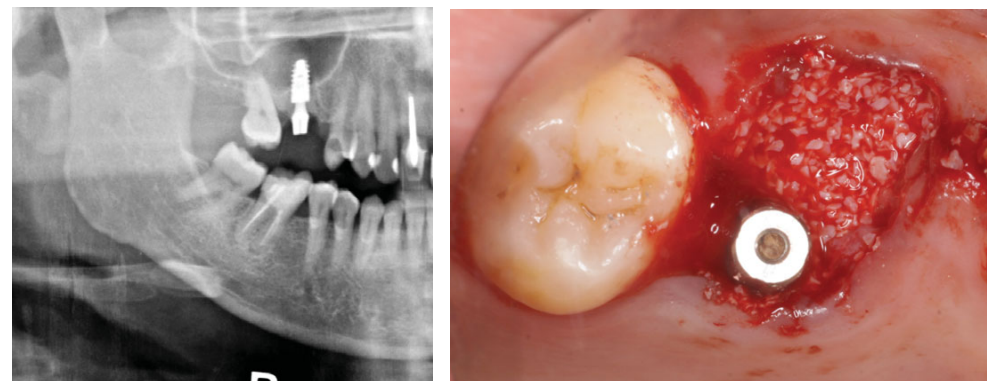


Materials and Methods

After separating the roots to avoid fractures in the surrounding bony walls the extraction could be performed without complications. The implant bed was prepared without any rotating instruments. Drills might probably destroy the thin bony walls supporting the palatal root, which would avert the possibility of immediate implant installation. The conical reamer was gently pushed upwards using an instrument for vertical condensation (Ustomed Germany) and a hammer. The gap of the buccal roots was filled with a slow resorbing bovine bone substitute material.



An ANKYLOS - STANDARD B abutment was inserted and a simple provisional crown was produced chair side to support the soft-tissue architecture.



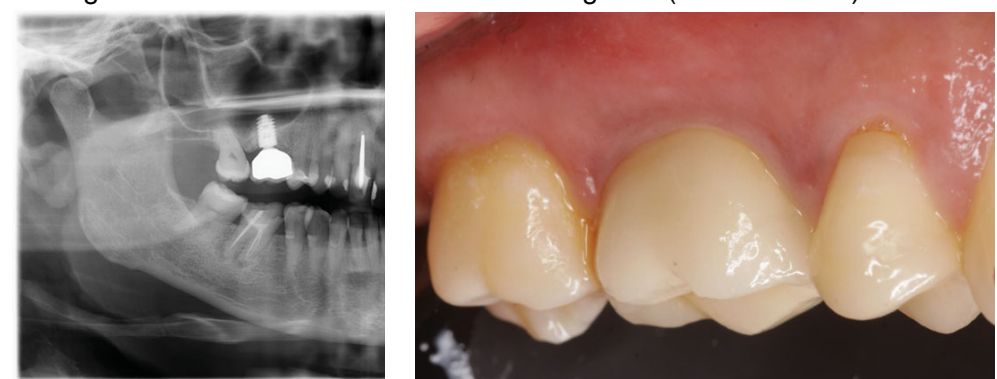
Six weeks after implant insertion an impression with a reposition post was performed and an individual two-piece abutment on a titanium base was produced. The final zirconia crown was inserted 8 weeks after implant placement.



Results

The final picture shows the excellent preservation of the soft-tissue architecture 2 years after implant installation.

The panoramic x-ray shows the appositional bone reaction around the implant due to bone training and the natural reaction of the bone on raising loads (Wolff'sches Law).



Conclusions

Through the placement of the implant in the palatal root a second surgery could be avoided. Furthermore the patient did not have to undergo a sinus lifting procedure. This increased the patient comfort by reducing appointments, treatment time and morbidity.

Kontakt

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